

SUBCHAPTER I : HAZARDOUS WASTE INCINERATOR PERMITS

§305.171. Determining Operational Readiness.

For the purposes of determining operational readiness following completion of physical construction of a hazardous waste incinerator, the commission shall establish permit conditions including, but not limited to specification of allowable waste feeds and operating conditions, in a permit for a new hazardous waste incinerator. These permit conditions will be effective for a minimum required time, not to exceed 720 hours operating time for treatment of hazardous waste, to bring the incinerator to a point of operational readiness sufficient to conduct a trial burn. The commission may extend the duration of this operational period once, for up to 720 additional hours, at the request of the applicant when good cause is shown. The permit may be modified to reflect the extension pursuant to §305.69 (relating to Solid Waste Permit Modification at the Request of the Permittee)

(1) Applicant must submit a statement, with Part B of the permit application, which suggests the conditions necessary to operate in compliance with the performance standards of 40 Code of Federal Regulations §284.343 during this period. This statement should include, at a minimum, restrictions on waste constituents, waste feed rates and the operating parameters identified in 40 Code of Federal Regulations §264.345.

(2) The executive director shall review this statement and any other relevant information submitted with Part B of the permit application and shall specify requirements for this period sufficient to meet the performance standards of 40 Code of Federal Regulations §264.343, based on the executive director's engineering judgment.

§305.172. Determining Feasibility of Compliance and Adequate Operating Conditions.

For the purposes of determining feasibility of compliance with the performance standards of 40 Code of Federal Regulations (CFR) §264.343 and of determining adequate operating conditions under 40 CFR §264.345, the commission shall establish conditions in the permit for a new hazardous waste incinerator, to be effective during the trial burn.

(1) Applicant shall propose a trial burn plan, prepared under paragraph (2) of this section, with Part B of the permit application.

(2) The trial burn plan shall include the following information:

(A) an analysis of each waste or mixture of wastes to be burned which includes:

(i) heat value of the waste in the form and composition in which it will be burned;

(ii) viscosity (if applicable), or description of physical form of the waste;

(iii) an identification of any hazardous organic constituents listed in 40 CFR Part 261, Appendix VIII, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in Part 261, Appendix VIII, which reasonably would not be expected to be found in the waste. The constituents excluded from analysis must be identified, and the basis for their exclusion established. The waste analysis must rely on analytical techniques specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in 40 CFR §260.11 and in §305.150 of this title (relating to Incorporation of References), or their equivalent; and

(iv) an approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in 40 CFR §260.11 and in §305.150 of this title (relating to Incorporation of References), or their equivalent;

(B) a detailed engineering description of the incinerator for which the permit is sought, including:

(i) manufacturer's name and model number of incinerator (if available);

(ii) type of incinerator;

(iii) linear dimensions of the incinerator unit including the cross sectional area of combustion chamber;

(iv) description of the auxiliary fuel system (type/feed);

(v) capacity of prime mover;

(vi) description of automatic waste feed cut-off system(s);

(vii) stack gas monitoring and pollution control equipment;

(viii) nozzle and burner design;

(ix) construction materials; and

(x) location and description of temperature, pressure, and flow indicating and control devices;

(C) a detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis;

(D) a detailed test schedule for each waste for which the trial burn is planned including date(s), duration, quantity of waste to be burned, and other factors relevant to the decision under paragraph (5) of this section;

(E) a detailed test protocol, including, for each waste identified, the ranges of temperature, waste feed rate, combustion gas velocity, use of auxiliary fuel, and any other relevant parameters that will be varied to affect the destruction and removal efficiency of the incinerator;

(F) a description of, and planned operating conditions for, any emission control equipment which will be used;

(G) procedures for rapidly stopping the waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction; and

(H) such other information as the executive director reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this paragraph and the criteria in paragraph (5) of this section.

(3) The executive director, in reviewing the trial burn plan, shall evaluate the sufficiency of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of this section.

(4) Based on the waste analysis data in the trial burn plan, the commission shall specify as trial principal organic hazardous constituents (POHCs), those constituents for which destruction and removal efficiencies must be calculated during the trial burn. These trial POHCs will be specified by the commission based on an estimate of the difficulty of incineration of the constituents identified in the waste analysis, their concentration or mass in the waste feed, and for wastes listed in 40 CFR Part 261, Subpart D, the hazardous waste organic constituent or constituents identified in Appendix VII of that part as the basis for listing.

(5) The commission shall approve a trial burn plan if it finds that:

(A) the trial burn is likely to determine whether the incinerator performance standard required by 40 CFR §264.343 can be met;

(B) the trial burn itself will not present an imminent hazard to human health or safety or the environment;

(C) the trial burn will help the commission to determine the operating requirements to be specified (in the permit) according to 40 CFR §264.345; and

(D) the information sought in subparagraphs (A) and (C) of this paragraph cannot reasonably be developed through other means.

(6) During each approved trial burn (or as soon after the burn as practicable), the applicant must make the following determinations:

(A) a quantitative analysis of the trial POHCs in the waste feed to the incinerator;

(B) a quantitative analysis of the exhaust gas for the concentration and mass emissions of the trial POHCs, oxygen (O₂) and hydrogen chloride (HCl);

(C) a quantitative analysis of the scrubber water (if any), ash residues, and other residues, for the purpose of estimating the fate of the trial POHCs;

(D) a computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in 40 CFR §264.343(a);

(E) if the HCl emission rate exceeds 1.8 kilograms of HCl per hour (four pounds per hour), a computation of HCl removal efficiency in accordance with 40 CFR §264.343(b);

(F) a computation of particulate emissions, in accordance with 40 CFR §264.343(c);

(G) an identification of sources of fugitive emissions and their means of control;

(H) a measurement of average, maximum, and minimum temperatures and combustion gas velocity;

(I) a continuous measurement of carbon monoxide (CO) in the exhaust gas; and

(J) such other information as the executive director may specify as necessary to ensure that the trial burn will determine the compliance with the performance standards in 40 CFR §264.343 and to establish the operating conditions required by 40 CFR §264.345 as necessary to meet those performance standards.

(7) The applicant must submit to the executive director a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and shall submit the results of all the determinations required in paragraph (6) of this section. This submission shall be made within 90 days of completion of the trial burn, or later with the prior approved of the executive director.

(8) All data collected during any trial burn shall be submitted to the executive director immediately following the completion of the trial burn.

(9) All submissions required by this section shall be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under §305.44 of this title (relating to Signatories to Applications) and §305.128 of this title (relating to Signatories to Reports).

(10) Based on the results of the trial burn, the commission shall set the operating requirements in the final permit according to 40 CFR §264.345. The permit amendment or modification shall proceed according to §305.62 of this title (relating to Amendment) or §305.69(c) of this title (relating to Solid Waste Permit Modification at the Request of the Permittee).

Adopted October 23, 1996

Effective November 20, 1996

§305.173. Operation Prior to Final Amendment of the Permit.

For the purposes of allowing operation of a new hazardous waste incinerator following completion of the trial burn and prior to final amendment of the permit conditions to reflect the trial burn results, the commission may establish permit conditions, including but not limited to allowable waste feeds and operating conditions sufficient to meet the requirements of 40 Code of Federal Regulations §264.345 in the permit for a new hazardous waste incinerator. These permit conditions will be effective for the minimum time required to complete sample analysis, data computation and submission of the trial burn results by the applicant, and amendment of the facility permit by the commission.

(1) Applicants shall submit a statement, with Part B of the permit application, which identifies the conditions necessary to operate in compliance with the performance standards of 40 Code of Federal Regulations §264.343 during the trial burn period. This statement shall include, at a minimum, restrictions on waste constituents, waste feed rates and the operating parameters identified in 40 Code of Federal Regulations §264.345.

(2) The executive director shall review this statement and any other relevant information submitted with Part B of the permit application, and shall specify those requirements for this period most likely to meet the performance standards of 40 Code of Federal Regulations §264.343 based on the executive director's engineering judgment.

§305.174. Existing Incinerators.

For the purposes of determining feasibility of compliance with the performance standards of 40 Code of Federal Regulations §264.343 and of determining adequate operating conditions under 40 Code of Federal Regulations (CFR) §264.345, the applicant for a permit for an existing hazardous waste incinerator must prepare and submit a trial burn plan and perform a trial burn in accordance with 40 CFR §270.19(b) and §§305.172(2)-(9) of this title (relating to Determining Feasibility of Compliance and Adequate Operating Conditions) or, instead, submit other information as specified in 40 CFR §270.19(c). Applicants submitting information specified in 40 CFR §270.19(a) are exempt from compliance with 40 CFR §§264.343 and 264.345 and, therefore, are exempt from the requirement to

conduct a trial burn. Applicants who submit trial burn plans and receive approval before submission of a permit application shall complete the trial burn and submit the results, specified in §305.172 of this title (relating to Determining Feasibility of Compliance and Adequate Operating Conditions) with Part B of the permit application. If completion of this process conflicts with the date set for submission of the Part B application, the applicant shall contact the executive director to establish a later date for submission of the Part B application or the trial burn results. Trial burn results must be submitted prior to issuance of the permit. When the applicant submits a trial burn plan with Part B of the permit application, the executive director will specify a time period prior to permit issuance in which the trial burn must be conducted and the results submitted.